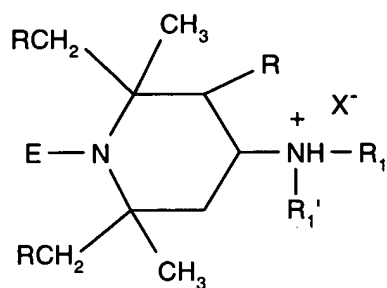
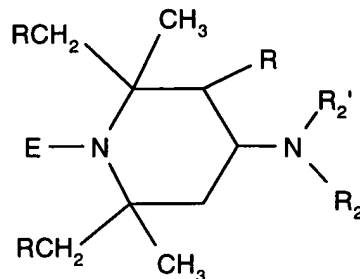


What is Claimed is:

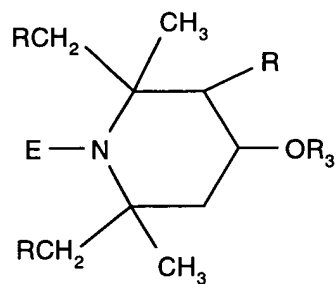
1. A water compatible or water soluble sterically hindered alkoxyamine or hydroxy substituted alkoxyamine compound selected from the group consisting of compounds of formulae (1)-(10)



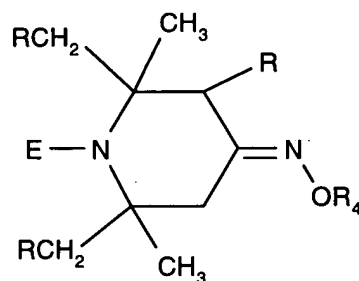
(1)



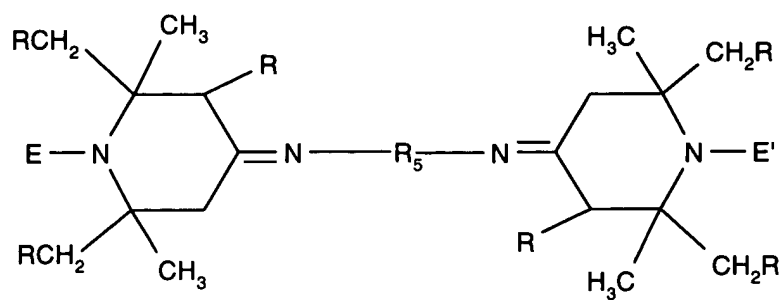
(2)



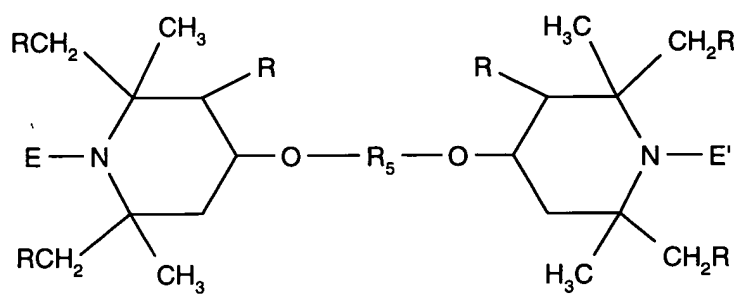
(3)



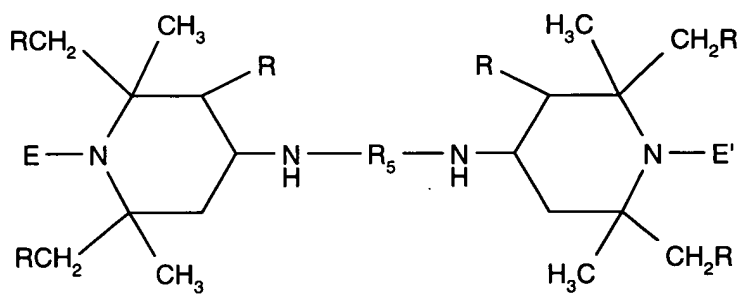
(4)



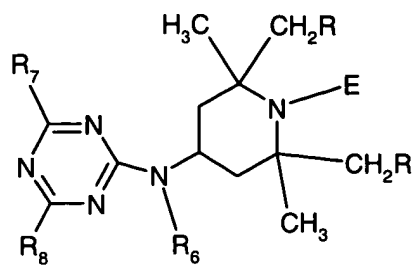
(5)



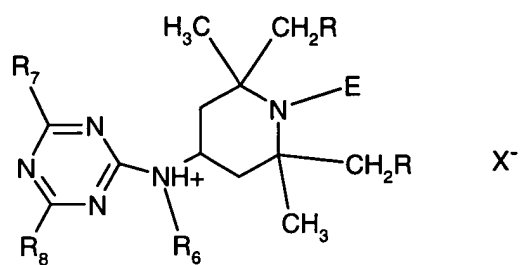
(6)



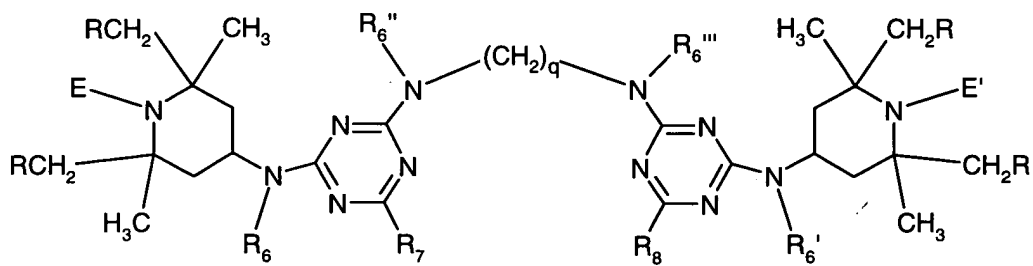
(7)



(8)



(9)



(10)

where

E is alkoxy of 1 to 18 carbon atoms, cycloalkoxy of 5 to 12 carbon atoms or aralkoxy of 7 to 15 carbon atoms, or E is -O-T-(OH)_b,

T is a straight or branched chain alkylene of 1 to 18 carbon atoms, cycloalkylene of 5 to 18 carbon atoms, cycloalkenylene of 5 to 18 carbon atoms, a straight or branched chain alkylene of 1 to 4 carbon atoms substituted by phenyl or by phenyl substituted by one or two alkyl groups of 1 to 4 carbon atoms;

b is 1, 2 or 3 with the proviso that b cannot exceed the number of carbon atoms in T, and when b is 2 or 3, each hydroxyl group is attached to a different carbon atoms of T;

E' is hydrogen, C₁-C₁₈alkyl, C₂-C₁₈alkenyl, C₇-C₁₅phenylalkyl, C₂-C₁₈alkanoyl or phenyl, or E' is independently defined as for E,

R is hydrogen or methyl,

R₁ is hydrogen, C₁-C₁₂alkyl, C₅-C₈cycloalkyl, C₅-C₈cycloalkyl substituted by one to three C₁-C₄alkyl, C₂-C₁₂alkenyl, phenyl, C₇-C₉phenylalkyl, glycidyl, C₂-C₁₂alkanoyl, C₆-C₉cycloalkylcarbonyl, C₂-C₁₂carbamoyl, C₂-C₁₂alkenoyl, benzoyl, benzoyl substituted by one to three C₁-C₄alkyl, C₂-C₁₂alkanoyl substituted by a di(C₁-C₆alkyl) phosphonate,

or R₁ is C₂-C₁₂alkyl, C₂-C₁₂alkanoyl or C₇-C₁₈phenylalkyl, each interrupted by one to six oxygen, sulfur or -N(R₆)- groups; C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each substituted by one to six hydroxy groups or by one to six -NHR₆ groups; C₂-C₁₂alkyl, C₂-C₁₂alkanoyl or C₇-C₁₈phenylalkyl, each interrupted by one to three -NR₆C(O)- groups; or C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each substituted by one to three -SO₃H groups or by one to three -COOR₆ groups; or

R₁ is said alkyl substituted by a piperazine or by a morpholine group; or

R₁ is said interrupted group further substituted by one to six hydroxy groups or by one to six -NHR₆ groups; or

R₁ is said interrupted group further substituted by one to three -SO₃H groups or by one to three -COOR₆ groups;

or R_1 is a mono-valent homo- or co-oligomer consisting of monomer units derived from monomers selected from the group consisting of ethylene oxide, propylene oxide, ethylene glycol, propylene glycol, acrylic acid, methacrylic acid, ethylene imine, acrylamide, vinyl formamide, vinyl alcohol and vinyl acetate; which homo- or co-oligomer consists of between 2 and about 24 monomer units;

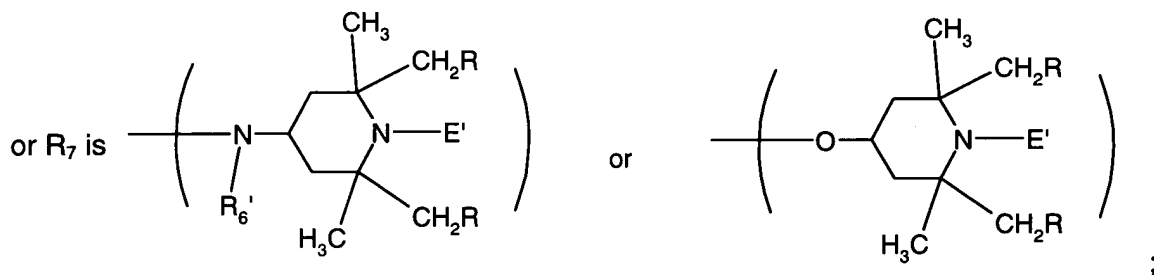
R_1' is independently defined as for R_1 ,

R_5 is a divalent homo- or co-oligomer consisting of monomer units derived from monomers selected from the group consisting of ethylene oxide, propylene oxide, ethylene glycol, propylene glycol, acrylic acid, methacrylic acid, ethylene imine, acrylamide, vinyl formamide, vinyl alcohol and vinyl acetate; which homo- or co-oligomer consists of between 2 and about 24 monomer units,

R_6 is hydrogen or C_1 - C_6 alkyl,

R_6' , R_6'' and R_6''' are independently defined as for R_6 ,

R_7 is $-N(R_2)(R_2')$ or is chlorine, alkoxy of 1 to 12 carbon atoms, 2-hydroxyethylamino or $-N(R_6)(R_6')$;



R_8 is defined as for R_7 , where one of R_7 and R_8 is $-N(R_2)(R_2')$;

q is 2 to 8;

X^- is an inorganic or organic anion,

Y^+ is a mono-, di- or tri-valent cation, and

when E is is -O-T-(OH)_b,

R_2 is glycidyl, C₂-C₁₂alkanoyl substituted by a di(C₁-C₆alkyl) phosphonate, or

R_2 is C₂-C₁₂alkyl, C₂-C₁₂alkanoyl or C₇-C₁₈phenylalkyl, each interrupted by one to six oxygen, sulfur or -N(R₆)- groups; C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each substituted by one to six hydroxy groups or by one to six -NHR₆ groups; C₂-C₁₂alkyl, C₂-C₁₂alkanoyl or C₇-C₁₈phenylalkyl, each interrupted by one to three -NR₆C(O)- groups; or R_2 is C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each substituted by one to three -SO₃H groups or by one to three -COOR₆ groups; or

R_2 is said alkyl substituted by a piperazine or by a morpholine group; or

R_2 is said interrupted group further substituted by one to six hydroxy groups or by one to six -NHR₆ groups; or

R_2 is said interrupted group further substituted by one to three -SO₃H groups or by one to three -COOR₆ groups; or

R_2 is C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each substituted by one or two -COO⁻Y⁺, -N(R₆)(R₆')⁺X⁻ or -SO₃⁻Y⁺ groups; or

R_2 is said C₁-C₁₂alkyl, C₂-C₁₂alkanoyl, phenyl or C₇-C₁₈phenylalkyl, each of which is substituted by one or two -COO⁻Y⁺, -N(R₆)(R₆')⁺X⁻ or -SO₃⁻Y⁺ groups, each further substituted by one or two -OH, -COOR₆ or -NHR₆ groups; or

R_2 is a mono-valent homo- or co-oligomer consisting of monomer units derived from monomers selected from the group consisting of ethylene oxide, propylene oxide, ethylene glycol, propylene glycol, acrylic acid, methacrylic acid, ethylene imine, acrylamide, vinyl formamide, vinyl alcohol and vinyl acetate; which homo- or co-oligomer consists of between 2 and about 24 monomer units,

R_2' is defined as for R_2 and may also be hydrogen,

R_3 is defined as for R_2 and may also be $-\text{SO}_3\text{H}$, $-\text{PO}_3\text{H}_2$, $-\text{SO}_3^-\text{Y}^+$ or $-\text{PO}_3\text{H}^-\text{Y}^+$, and

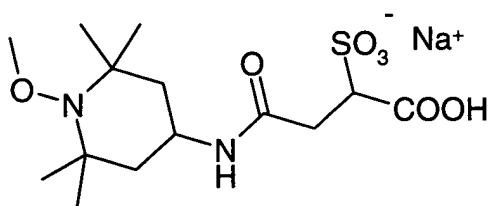
R_4 is defined as for R_2 and may also be hydrogen,

and

when E is alkoxy of 1 to 18 carbon atoms, cycloalkoxy of 5 to 12 carbon atoms or aralkoxy of 7 to 15 carbon atoms,

R_2 is C_1 - C_{12} alkyl, C_2 - C_{12} alkanoyl, phenyl or C_7 - C_{18} phenylalkyl, each substituted by one or two $-\text{COO}^-\text{Y}^+$, $-\text{N}(\text{R}_6)(\text{R}_6')^+\text{X}^-$ or $-\text{SO}_3^-\text{Y}^+$ groups; or

R_2 is said C_1 - C_{12} alkyl, C_2 - C_{12} alkanoyl, phenyl or C_7 - C_{18} phenylalkyl, each of which is substituted by one or two $-\text{COO}^-\text{Y}^+$, $-\text{N}(\text{R}_6)(\text{R}_6')^+\text{X}^-$ or $-\text{SO}_3^-\text{Y}^+$ groups, each further substituted by one or two $-\text{OH}$, $-\text{COOR}_6$ or $-\text{NHR}_6$ groups, with the proviso that the compound



is not included; or

R_2 is a mono-valent homo- or co-oligomer consisting of monomer units derived from monomers selected from the group consisting of ethylene oxide, propylene oxide, ethylene glycol, propylene glycol, acrylic acid, methacrylic acid, ethylene imine, acrylamide, vinyl formamide, vinyl alcohol and vinyl acetate; which homo- or co-oligomer consists of between 2 and about 24 monomer units;

R_2' is defined as for R_2 and may also be hydrogen,

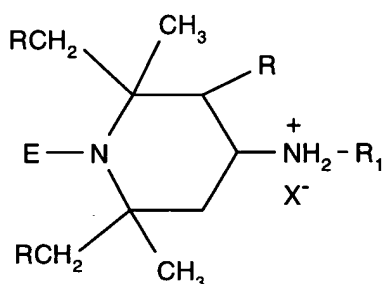
R_3 is defined as for R_2 and may also be $-\text{SO}_3\text{H}$, $-\text{PO}_3\text{H}_2$, $-\text{SO}_3^-\text{Y}^+$ or $-\text{PO}_3\text{H}^-\text{Y}^+$, and

R_4 is defined as for R_2 and may also be hydrogen.

2. A compound according to claim 1 where E is $-\text{O}-\text{T}(\text{OH})_b$.

3. A compound according to claim 1 where E is 2-hydroxycyclohexyloxy or 2-hydroxy-2-methylpropoxy.

4. A compound according to claim 2 of the formula



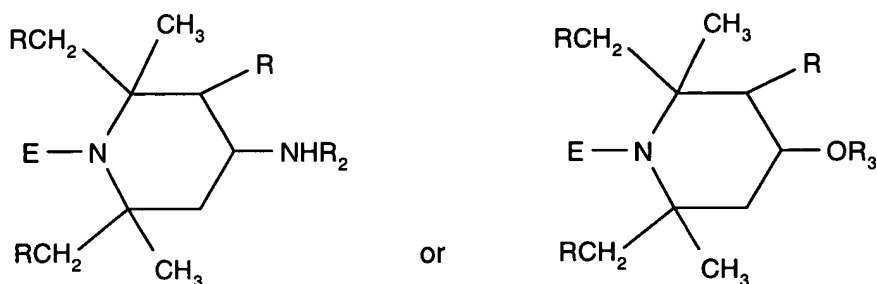
5. A compound according to claim 4 where

R_1 is hydrogen, $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_2\text{-C}_6$ alkanoyl, $\text{C}_2\text{-C}_6$ alkyl or $\text{C}_2\text{-C}_6$ alkanoyl interrupted by one or two oxygen, sulfur or $-\text{N}(\text{R}_6)-$ groups; $\text{C}_1\text{-C}_6$ alkyl or $\text{C}_2\text{-C}_6$ alkanoyl substituted by one to three hydroxy groups or by one to three $-\text{NHR}_6$ groups, $\text{C}_2\text{-C}_6$ alkyl or $\text{C}_2\text{-C}_6$ alkanoyl interrupted by a $-\text{NR}_6\text{C}(\text{O})-$ group, or is $\text{C}_1\text{-C}_6$ alkyl or $\text{C}_2\text{-C}_6$ alkanoyl substituted by a $-\text{SO}_3\text{H}$ or by a $-\text{COOR}_6$ group.

6. A compound according to claim 4 where

R_1 is hydrogen, C_1 - C_4 alkyl, C_2 - C_5 alkanoyl, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by an oxygen, sulfur or $-N(R_6)$ - group; C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a hydroxy group or by a $-NHR_6$ group, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by a $-NR_6C(O)$ - group, or is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-SO_3H$ or by a $-COOR_6$ group.

7. A compound according to claim 2 of the formula



8. A compound according to claim 7 where

R_2 and R_3 are C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by one or two oxygen, sulfur or $-N(R_6)$ - groups; C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by one to three hydroxy groups or by one to three $-NHR_6$ groups, C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by a $-NR_6C(O)$ - group, or R_2 is C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by a $-SO_3H$ group or by a $-COOR_6$ group; or

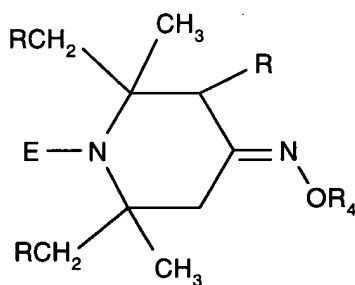
R_2 and R_3 are C_1 - C_6 alkyl, C_2 - C_6 alkanoyl or C_7 - C_9 phenylalkyl, each substituted by a $-COO^-Y^+$, $-N(R_6)(R_6')^+X^-$ or $-SO_3^-Y^+$ group.

9. A compound according to claim 7 where

R_2 and R_3 are C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by an oxygen, sulfur or $-N(R_6)$ - group; C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by an hydroxy group or by a $-NHR_6$ group, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by a $-NR_6C(O)$ - group, or R_2 is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-SO_3H$ group or by a $-COOR_6$ group; or

R_2 and R_3 are C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-COO^-Y^+$, $-N(R_6)(R_6')^+X^-$ or $-SO_3^-Y^+$ group.

10. A compound according to claim 2 of the formula



11. A compound according to claim 10 where

R_4 is hydrogen, C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by one or two oxygen, sulfur or $-N(R_6)$ - groups; C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by one to three hydroxy groups or by one to three $-NHR_6$ groups, C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by a $-NR_6C(O)$ - group, or R_4 is C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by a $-SO_3H$ group or by a $-COOR_6$ group; or

R_4 is C_1 - C_6 alkyl, C_2 - C_6 alkanoyl or C_7 - C_9 phenylalkyl, each substituted by a $-COO^-Y^+$,

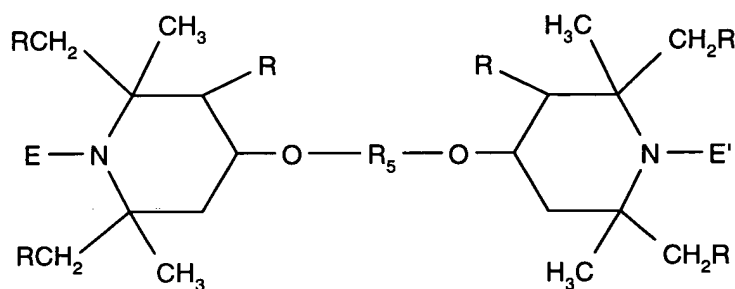
$-\text{N}(\text{R}_6)(\text{R}_6')^+\text{X}^-$ or $-\text{SO}_3^-\text{Y}^+$ group.

12. A compound according to claim 10 where

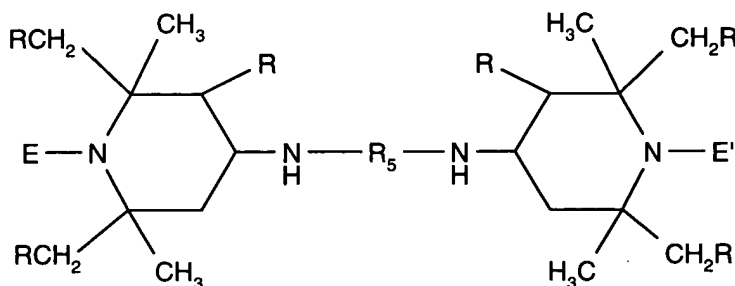
R_4 is hydrogen, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by an oxygen, sulfur or $-\text{N}(\text{R}_6)-$ group; C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a hydroxy group or by a $-\text{NHR}_6$ group, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by a $-\text{NR}_6\text{C}(\text{O})-$ group, or R_4 is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-\text{SO}_3\text{H}$ group or by a $-\text{COOR}_6$ group; or

R_4 is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-\text{COO}^-\text{Y}^+$, $-\text{N}(\text{R}_6)(\text{R}_6')^+\text{X}^-$ or $-\text{SO}_3^-\text{Y}^+$ group.

13. A compound according to claim 2 of the formula

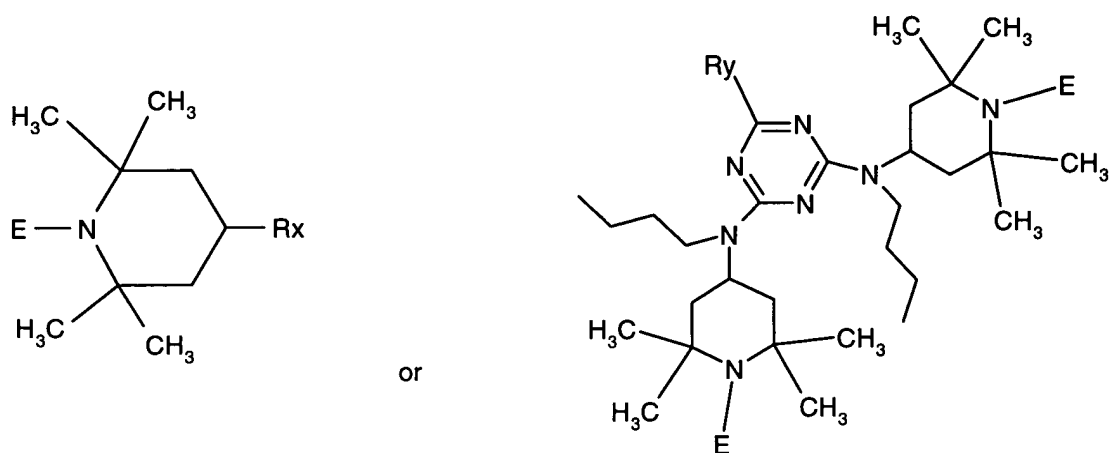


or



14. A compound according to claim 13 where R₅ is polyethylene glycol or polypropylene glycol.

15. A compound according to claim 2 of the formula



where

E is -O-T(OH)_b, and

where R_x is selected from the group consisting of

-NH₂⁺CH₂CH₂OH Cl⁻, -NHCH₂CH₂OH, -NH₃⁺ ⁻OAc, =NOH, -NHCH(CH₃)COO⁻K⁺,
 -NHCH₂CH₂N(CH₃)₂⁺ ⁻OAc, -NHCH₂CH₂SO₃⁻K⁺, -NHCH(COO⁻ K⁺)CH₂CH₂SCH₃,
 -NHCH₂COO⁻ K⁺, -NHCOCH₂OH, -NHCOCH₂NHCOCH₃, -NHCH₂CH₂CH₂SO₃H,
 -OCH₂CH₂OH, -OCH(CH₃)COO⁻K⁺, -OCH₂CH₂N(CH₃)₂⁺ ⁻OAc, -OCH₂CH₂SO₃⁻K⁺,
 -OCH(COO⁻ K⁺)CH₂CH₂SCH₃, -OCH₂COO⁻ K⁺, -OCOCH₂OH, -OCOCH₂NHCOCH₃ and
 -OCH₂CH₂CH₂SO₃H; and

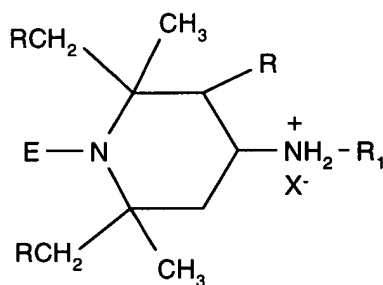
where R_y is selected from the group consisting of

-NHCH₂CH₂NHCH₂CH₂NHCH₂CH₂NH₂, -NH₂⁺CH₂CH₂NHCH₂CH₂NHCH₂CH₂NH₂⁻OAc,
 -NHPhSO₃H, -NHPhSO₃⁻K⁺, -NHPhSO₃⁻Na⁺, -NH₂⁺PhSO₃H Cl⁻, -NH(3-carboxy-4-chlorophenyl),
 -NH(3-COO⁻Na⁺-4-chlorophenyl), -NHCH₂CH₂-(N-piperazine),
 -NH₂⁺CH₂CH₂-(N-piperazine)⁻OAc and -NH₂⁺CH₂CH₂-(N-piperazine)⁻Cl.

16. A compound according to claim 1 where E is alkoxy of 1 to 18 carbon atoms, cycloalkoxy of 5 to 12 carbon atoms or aralkoxy of 7 to 15 carbon atoms.

17. A compound according to claim 1 where E is benzyloxy, methoxy, propoxy, butoxy, pentoxy, hexyloxy, heptyloxy, octyloxy or cyclohexyloxy.

18. A compound according to claim 16 of the formula



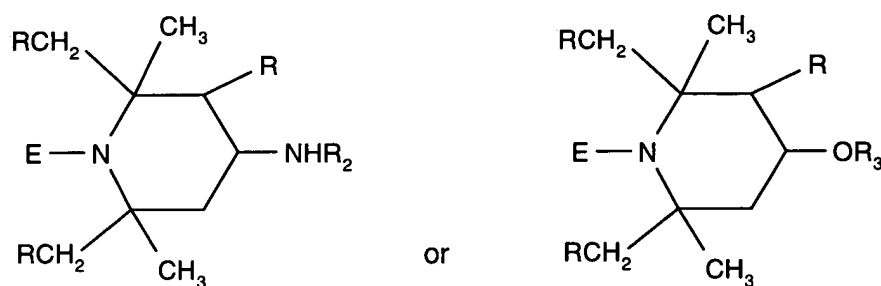
19. A compound according to claim 18 where

R_1 is hydrogen, C_1 - C_6 alkyl, C_2 - C_6 alkanoyl, C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by one or two oxygen, sulfur or $-N(R_6)$ - groups; C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by one to three hydroxy groups or by one to three $-NHR_6$ groups, C_2 - C_6 alkyl or C_2 - C_6 alkanoyl interrupted by a $-NR_6C(O)$ - group, or is C_1 - C_6 alkyl or C_2 - C_6 alkanoyl substituted by a $-SO_3H$ or by a $-COOR_6$ group.

20. A compound according to claim **18** where

R_1 is hydrogen, C_1 - C_4 alkyl, C_2 - C_5 alkanoyl, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by an oxygen, sulfur or $-N(R_6)$ - group; C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by an hydroxy group or by a $-NHR_6$ group, C_2 - C_4 alkyl or C_2 - C_5 alkanoyl interrupted by a $-NR_6C(O)$ - group, or is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-SO_3H$ or by a $-COOR_6$ group.

21. A compound according to claim **16** of the formula



22. A compound according to claim **21** where

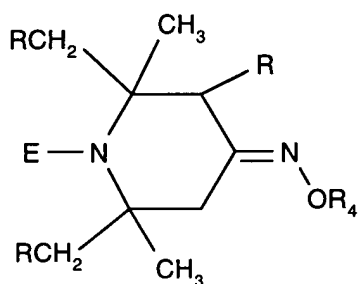
R_2 and R_3 are C_1 - C_6 alkyl, C_2 - C_6 alkanoyl or C_7 - C_9 phenylalkyl, each substituted by a

-COO⁻Y⁺, -N(R₆)(R₆')⁺X⁻ or -SO₃⁻Y⁺ group.

23. A compound according to claim **21** where

R₂ and R₃ are C₁-C₄alkyl or C₂-C₅alkanoyl substituted by a -COO⁻Y⁺, -N(R₆)(R₆')⁺X⁻ or -SO₃⁻Y⁺ group.

24. A compound according to claim **16** of the formula



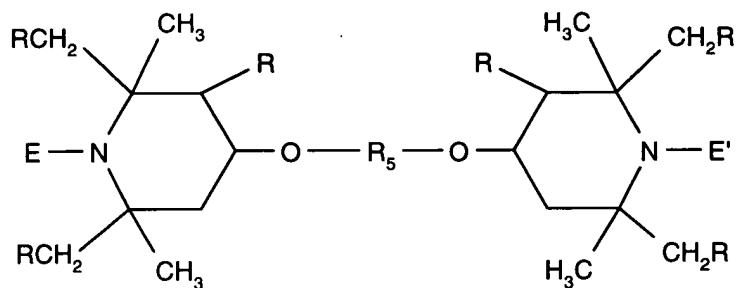
25. A compound according to claim **24** where

R₄ is C₁-C₆alkyl, C₂-C₆alkanoyl or C₇-C₉phenylalkyl, each substituted by a -COO⁻Y⁺, -N(R₆)(R₆')⁺X⁻ or -SO₃⁻Y⁺ group.

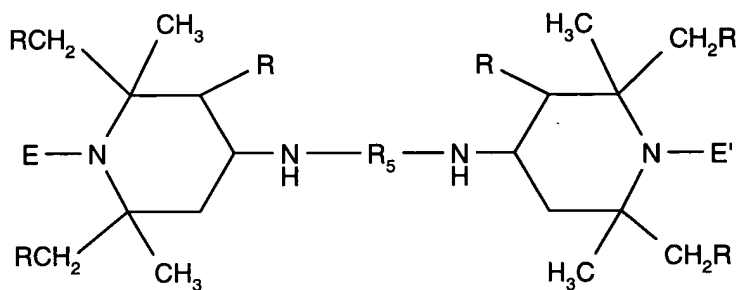
26. A compound according to claim **24** where

R_4 is C_1 - C_4 alkyl or C_2 - C_5 alkanoyl substituted by a $-COO^-Y^+$, $-N(R_6)(R_6')^+X^-$ or $-SO_3^-Y^+$ group.

27. A compound according to claim **16** of the formula.

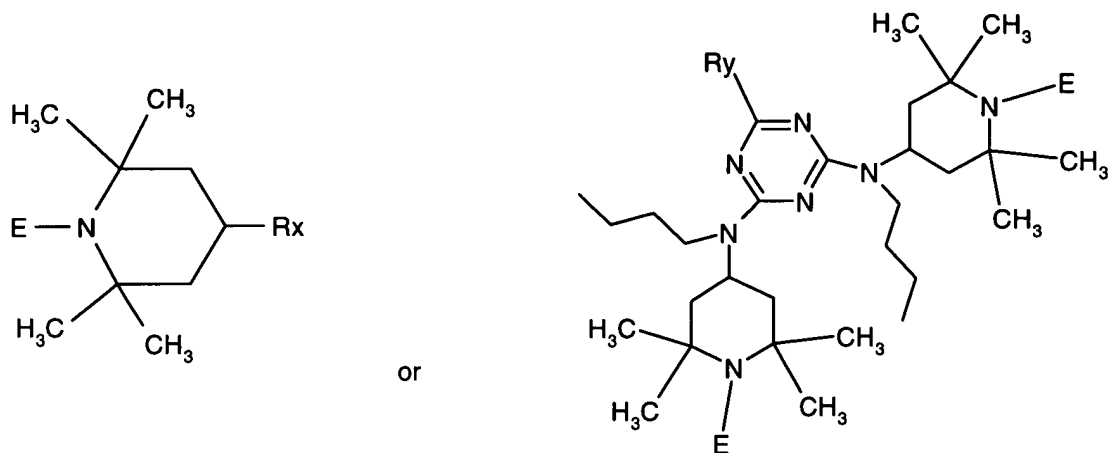


or



28. A compound according to claim **27** where R_5 is polyethylene glycol or polypropylene glycol.

29. A compound according to claim 16 of the formula



where

E is alkoxy of 1 to 18 carbon atoms, cycloalkoxy of 5 to 12 carbon atoms or aralkoxy of 7 to 15 carbon atoms, and

R_x is selected from the group consisting of

-NH₂⁺CH₂CH₂OH Cl⁻, -NH₃⁺ OAc, =NOH, -NHCH(CH₃)COO⁻K⁺,
 -NHCH₂CH₂N(CH₃)₂⁺ OAc, -NHCH₂CH₂SO₃⁻K⁺, -NHCH(COO⁻ K⁺)CH₂CH₂SCH₃,
 -NHCH₂COO⁻ K⁺, -OCH(CH₃)COO⁻K⁺, -OCH₂CH₂N(CH₃)₂⁺ OAc, -OCH₂CH₂SO₃⁻K⁺,
 -OCH(COO⁻ K⁺)CH₂CH₂SCH₃ and -OCH₂COO⁻ K⁺ and

where R_y is selected from the group consisting of

-NHCH₂CH₂NHCH₂CH₂NHCH₂CH₂NH₂, -NH₂⁺CH₂CH₂NHCH₂CH₂NHCH₂CH₂NH₂⁺ OAc,
 -NHPhSO₃H, -NHPhSO₃⁻K⁺, -NHPhSO₃⁻Na⁺, -NH₂⁺PhSO₃H Cl⁻, -NH(3-carboxy-4-chlorophenyl),
 -NH(3-COO⁻Na⁺-4-chlorophenyl), -NHCH₂CH₂-(N-piperazine),
 -NH₂⁺CH₂CH₂-(N-piperazine)⁺ OAc and -NH₂⁺CH₂CH₂-(N-piperazine)⁺ Cl.

30. A stabilized composition comprising

an organic material subject to the deleterious effects of light, heat and oxygen, and

an effective stabilizing amount of a water compatible or water soluble sterically hindered alkoxyamine or hydroxy substituted alkoxyamine compound according to claim 1.

31. A stabilized composition comprising

an organic material subject to the deleterious effects of light, heat and oxygen, and

an effective stabilizing amount of a water compatible or water soluble sterically hindered alkoxyamine or hydroxy substituted alkoxyamine compound according to claim 2.

32. A stabilized composition comprising

an organic material subject to the deleterious effects of light, heat and oxygen, and

an effective stabilizing amount of a water compatible or water soluble sterically hindered alkoxyamine or hydroxy substituted alkoxyamine compound according to claim 16.

33. A composition according to claim 30 which is a coating, ink jet ink, ink jet recording material, photographic recording material, multi-layer polymer structure, a coextruded film, a radiation cured film, ink or coating; an adhesive or a laminate.

34. A composition according to claim 30 which additionally comprises an effective stabilizing amount of at least one coadditive stabilizer selected from the group consisting of the phenolic antioxidants, metal stearates, metal oxides, organophosphorus compounds, furanone

antioxidants, hydroxylamines, ultraviolet light absorbers, and other hindered amine light stabilizers.

35. A composition according to claim **30** which additionally comprises an ultraviolet light absorber selected from the group consisting of the benzophenones, 2H-benzotriazoles, aryl-s-triazines.

36. A composition according to claim **30** which is a colored composition containing pigments or dyes.

37. A composition according to claim **30** which is a colored composition containing dyes.

38. A composition according to claim **30** which is a colored composition containing dyes, which composition is selected from the group consisting of ink jet inks, ink jet recording media, coatings, body care products, household products, textiles and fabrics.

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